Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Nurs Clin N Am 40 (2005) 453–467
NURSING CLINICS
OF NORTH AMERICA

Disaster Competency Development and Integration in Nursing Education

Joan M. Stanley, PhD, RN, CRNP, FAAN[a,b,*]

[a]American Association of Colleges of Nursing, One Dupont Circle NW, Suite 530, Washington, DC 20036, USA
[b]Faculty Practice Office, University of Maryland Hospital, 419 W. Redwood Street, Baltimore, MD 21201, USA

Before Sept. 11, 2001, nurses were providing essential health services in response to mass casualty incidents (MCIs), including Hurricane Andrew, the Oklahoma City bombing, and the 2001 floods in Houston, Texas. Since Sept. 2001, however, the United States has undertaken a comprehensive reevaluation of its preparedness and the resources necessary to amass a response to critical events, particularly those posed by various forms of terrorism. The 2.7 million nurses registered to practice in the United States [1] represent a significant resource. This resource must be a core component of any national preparedness plan. To be effective, however, nursing must evaluate and enhance its own capabilities to respond to such events. Subsequently, nursing education must prepare nurses to fulfill this critical role.

Nurses are uniquely qualified to be early responders for MCIs or to deal with their long-term effects. They are expert in assessment skills, priority setting, and communication and collaboration. Additionally, they are prepared in an array of specialized areas from intensive care or trauma nursing, to public health nursing, to psychological–mental health nursing. Nurses are critical thinkers and can make decisions necessary in emergency situations. Nurses with advanced education and experience in trauma or critical care can fill more advanced triage, diagnostic, and treatment roles on the scene of an MCI. Because of the diverse educational background, experiences, and practice settings of nurses within the community and health care system, the potential roles of the professional nurse in an MCI may vary extensively.

To be an integral part of the community's plan for emergency preparedness in MCIs, nurses must have a basic level of education to appropriately respond and protect themselves and others, particularly during chemical, biological, radiologic, nuclear, and explosive (CBRNE) events. Not all nurses must be prepared to be first responders to CBRNE events. Every nurse, however, must

*American Association of Colleges of Nursing, One Dupont Circle NW, Suite 530, Washington, DC 20036, USA. *E-mail address*: jstanley@aacn.nche.edu

0029-6465/05/$ – see front matter
doi:10.1016/j.cnur.2005.04.009

have sufficient knowledge and skill to recognize the potential for an MCI, identify when such an incident may have occurred, know how to protect oneself, know how to provide immediate care for those individuals involved, recognize their own roles and limitations, and know where to seek additional information and resources. Nurses also must have sufficient knowledge to know when their own health and welfare may be in jeopardy and know how to protect themselves and others.

National nursing education standards and competencies do not mandate or recommend that all nurses be educated to respond to MCIs. Prior to the events of September 2001, nursing educators and organizations had begun to re-evaluate what nursing education's role should be in addressing the national and international response to MCIs.

NURSING EDUCATION'S ROLE IN DISASTER PREPAREDNESS

Nursing education's role is pivotal in ensuring that nursing as a discipline is prepared to meet its critical role in emergency preparedness plans. Successful implementation of this role depends on the participation and collaboration of education and professional organizations, accreditation and regulatory bodies or agencies, schools of nursing and individual faculty, and continuing education providers.

Broadly conceived, the roles of these four entities overlap and complement one another, producing change within the nursing profession. Increasing nurses' effectiveness for mass casualty preparedness highlights the necessary congruence within nursing.

THE INTERNATIONAL NURSING COALITION FOR MASS CASUALTY EDUCATION

Nursing education's role and preparation to respond to MCIs are reflected in the collaborative activities and goals of the International Nursing Coalition for Mass Casualty Education (INCMCE). This coalition, comprised of nursing organizations, specialty organizations, schools of nursing, regulators, accreditors, and federal agencies, was spearheaded by the Department of Health and Human Services' Office of Emergency Preparedness (now Office of Emergency Response) and the Vanderbilt University School of Nursing. The goals of INCMCE include:

- Increasing the awareness and knowledge of all nurses about MCIs
- Influencing research efforts designed to improve nursing care and responses to MCIs
- Monitoring legislation and regulatory policies related to mass casualty education (MCE)
- Increasing effectiveness of all nurses responding to MCIs

Prior to September 2001, INCMCE had identified the first of these goals as the number one priority and issued a media release on nursing's important role

in MCIs. After September 2001, the goals of the coalition were reversed, and the primary focus shifted to the effectiveness of nurses responding to MCIs.

ROLE OF NURSING EDUCATION AND PROFESSIONAL NURSING ORGANIZATIONS

The role of education and professional nursing organizations includes such activities as:

- Participation in the development and validation of core competencies
- Dissemination of competencies to members and other constituents
- Faculty development related to the core competencies and nursing education's role
- Development and assembling of resources to prepare nurses in the area of MCIs
- Provision of continuing education programs/materials for practicing nurses
- Seeking monies (eg, federal and state monies or foundational support) for the preparation of nurses and faculty
- Development and support of a research framework related to MCIs

ROLE OF ACCREDITATION AND REGULATORY AGENCIES

The role of specialty nursing accreditation bodies, such as the Commission on Collegiate Nursing Education (CCNE) and the National League for Nursing Accrediting Commission (NLNAC), includes such activities as:

- Participation in the development and validation of core competencies
- Determining whether the MCI competencies should be required of and documented by a program or school to receive accreditation
- Determining whether MCI content in any form should be mandated for inclusion in a nursing program

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) mandates specific areas in which all health care institutions must ensure that employees are prepared. As part of a national emergency preparedness plan, JCAHO could mandate that health care institutions be required to document the competence of all employed registered nurses (RNs) and other health professionals regarding their ability to appropriately respond to MCIs. After September 2001, JCAHO modified its accreditation standards for hospitals to include requirements regarding emergency planning, exercises, and training [2].

State boards of nursing maintain a nursing education program review function, some to a greater degree than others. In establishing criteria for licensure within the state, a state board of nursing could mandate that a candidate for a registered nurse license graduate from a program that includes MCI content or has documented competence regarding MCI response. Several state boards also mandate continuing education credits for licensure renewal. A certification or continuing education program in mass casualty response could be developed and required for license renewal. The National Council

Licensure Examination (NCLEX) administered by the National Council of State Boards of Nursing (NCSBN) is based on role delineation studies of practicing nurses. As the role of the practicing nurse evolves to include preparation for emergency preparedness, MCI content could be included in the national licensure examination.

SCHOOLS OF NURSING AND FACULTY ROLES

Schools of nursing and nursing faculty play critical roles in preparing nurses for emergency preparedness and response. Specific activities and roles include:

- Participation in the development and validation of core competencies
- Curriculum development or redesign to include content and clinical experiences related to MCIs
- Development and maintenance of faculty expertise and competence
- Assessment of the competence of graduates
- Development of teaching resources and materials
- Design and implementation of research related to MCIs and improving nursing care and responses in MCIs

ROLE OF CONTINUING EDUCATION PROVIDERS

Although similar to that of nursing faculty and frequently dependent upon regulatory and accreditation standards, continuing education providers have a critical role in educating RNs and assuring effective response to MCIs. Specifically, the role of continuing education providers includes:

- Development of continuing education modules or courses in various formats, including traditional classroom and Web-based formats
- Dissemination of learning resources and materials
- Education of RNs practicing in varied settings and with very diverse education and practice backgrounds

INCREASING EFFECTIVENESS OF RESPONSES TO MASS CASUALTY INCIDENTS

Immediately after September 2001, increasing the effectiveness of all nurses in responding to MCIs became the primary focus of INCMCE. Nursing education standards have not mandated or recommended that nurses graduating from entry-level nursing programs or advanced practice nursing programs receive preparation related to MCIs. More recently however, many nursing schools have been evaluating and augmenting their curricula related to disaster response and care of mass casualties. Likewise, most health care institutions previously did not recognize the need or importance of requiring nurses and other health care professionals to receive training related to MCIs or had trained only a select group as part of an emergency response team. To ensure that nurses are prepared to respond appropriately and safely to MCIs and to assist nursing schools and continuing education providers to meet this

challenge, INCMCE developed a set of core competencies related to mass casualty incidents for all entry-level nurses.

PROCESS TO DEVELOP MASS CASUALTY EDUCATION NURSING COMPETENCIES

Two phases, an internal and an external review phase, were used for the development of consensus-based competencies for MCE of all nurses. A subcommittee of INCMCE, comprised of representatives of schools of nursing and national nursing education and accreditation organizations, was identified to accomplish this task. Competencies for MCE were developed previously for various groups of health care professionals. Therefore, prior to developing a set of MCE nursing competencies, existing educational curricula and sets of competencies were reviewed and evaluated. The recommendations and competencies developed by the subcommittee were based heavily on the competencies delineated by other health profession groups, including the Task Force of Health Care and Emergency Services Professionals [3]; Association of State and Territorial Directors of Nursing [4]; Center for Health Policy, Columbia School of Nursing [5]; University of Ulster, University of Glamorgan School of Health Sciences School of Nursing [6]; and the Uniformed Services University of the Health Sciences Graduate School of Nursing (Faye G. Abdellah, personal communication, 2001).

Following the initial review and evaluation of these existing health profession documents, a set of entry-level or basic competencies was developed by the subcommittee and presented to the larger coalition. During this initial internal phase, the coalition and subcommittee had several opportunities to provide input and recommend revisions. Upon completion of this first phase, phase two or the external review phase involved a validation panel comprised of a larger group of representatives from nursing practice, education, accreditation, and certification. Validation panel members reviewed the competencies to assess their relevance, specificity, and comprehensiveness for entry-level nursing.

Using the previously developed competency validation tool and process [7], participants on the validation panel were asked to review systematically each individual competency according to the following criteria:

- Relevance. Is the competency necessary? (yes, no, or do not know)
- Specificity. Is the competency stated specifically and clearly? (yes, no, do not know, and suggested rewording)
- Comprehensiveness. In your opinion, if there is any aspect of general nursing knowledge, skill, or personal attributes missing? (Please enter those new competencies.)

Based on feedback from the validation panel, a national, consensus-based set of educational competencies for RNs responding to MCIs was endorsed by INCMCE [8].

The dissemination and implementation of these national consensus-based competencies is ongoing. One of the critical steps in the implementation of the

competencies and the effective preparation of nurses is integrating content and skills into the nursing curriculum.

MASS CASUALTY EDUCATION COMPETENCIES FOR ALL NURSES

What is meant by all nurses? All practicing nurses? All licensed RNs? All retired nurses? Student nurses? Nurses practicing in all settings and specialty areas? These are some of the questions with which INCMCE members struggled. A general consensus among coalition members prevailed: that all RNs currently licensed to practice and all nurses educated from now on should have some basic level of knowledge and skill related to MCIs. This very broad definition of all nurses is the ultimate target for preparing nurses with competence in MCI preparedness and response.

To facilitate the integration of the MCE competencies into the nursing curricula, an existing nursing curriculum framework was used as a basis for the development of the competencies. *The Essentials of Baccalaureate Education for Professional Nursing Practice* [9] provides a framework for baccalaureate nursing curricula. The essentials of professional nursing education include five key components: liberal education, professional values, core competencies, core knowledge, and role development. Using this framework, the three components addressed by the MCE document are core competencies, core knowledge, and role development.

COMPETENCY FRAMEWORK

The American Association of Colleges of Nursing (AACN) essentials [9] were used as a framework for delineating outcome competencies related to MCIs expected of all RNs. To highlight the knowledge and skill level expected of all nurses in the future, examples of the MCI competencies embedded within the essentials framework are presented in Appendix 1.

CORE COMPETENCIES

The nursing MCI competencies related to professional role development are not differentiated by specific roles, such as provider of care, designer/manager/coordinator of care, or member of a profession. Areas of competence encompass all three critical nursing roles. Several examples of the competencies are listed in Box 1.

INTEGRATING MASS CASUALTY EDUCATION INTO THE NURSING CURRICULUM

Sixty-four competencies are delineated in the INCMCE *Educational Competencies for Registered Nurses Responding to Mass Casualty Incidents* [8]. These national consensus-based competencies apply to all professional RN roles and practice settings, and are intended to describe entry-level practice. All nurses from novice to expert should have a basic knowledge and ability to respond to MCIs independent of their education and practice experience. The individual

Box 1: Mass casualty incident competencies concerning professional role development [8]

Identify the most appropriate or most likely health care role for oneself during an MCI.

Describe the nursing roles in MCIs

- Researcher
- Investigator/epidemiologist
- EMT or first responder
- Direct care provider, generalist nurse
- Direct care provider, advanced practice nurse (APN)
- Director/coordinator of care in hospital/nurse administrator or emergency department nurse manager
- Onsite coordinator of care/incident commander
- Onsite director of care management
- Information provider or educator, particularly the role of the generalist nurse
- Mental health counselor
- Member of planning response team
- Member of community assessment team
- Manager or coordinator of shelter
- Member of decontamination team
- Triage officer

Identify the limits to one's own knowledge/skills/abilities/authority related to MCIs.

Recognize the importance of maintaining one's expertise and knowledge in this area of practice and of participating in regular emergency response drills.

competencies are intentionally general and must be interpreted in relation to the functional role of an individual nurse within an agency or community. Competencies will be applied to practice in differing ways depending on the specific roles and responsibilities the nurse performs within the health care system or community. Therefore, the dilemma for nursing educators is to determine how can graduates be prepared with this knowledge and skill set? And what content and experiences are already being taught, and what needs to be added or augmented?

Much of the knowledge and experiences underpinning the competencies related to appropriate and timely response to MCIs are basic to nursing practice. Therefore, most of the principles and information necessary for the development of competence in these areas are included in all basic nursing education programs to some degree. Until the past several years, however, most nursing educators, or the population in general, did not focus on emergency preparedness and the role nurses should play. Therefore, the

context in which these MCI competencies may be taught and utilized could vary dramatically.

An overall assessment of the existing curriculum is recommended prior to adding any additional content or clinical experiences. Many schools have used curriculum mapping not only for identifying content related to MCE, but also for any general knowledge area that is threaded throughout the curriculum. Frequently what occurs is new content is added to one or two courses without evaluating how this content builds upon or supports content and experiences throughout the remaining curriculum. Critical questions that nursing educators must ask are:

- What content and experiences are already included in the curriculum that address the MCI competencies?
- What basic content or principles that are already being taught can be reframed in order to redirect or refocus critical thinking and application surrounding this content?
- What content and experiences, already included in the curriculum, can be enhanced or supplemented to prepare graduates with the necessary competence related to MCIs?
- What additional content and experiences specific to emergency preparedness and MCI response need to be added to the curriculum?
- What pedagogical techniques can be used best for preparing graduates with these competencies?
- What resources are available to teach this content?
- How can the competence of graduates related to MCI preparedness be assessed?
- How best can we evaluate the curriculum and teaching methodologies used to achieve these outcomes?

INTEGRATING MASS CASUALTY INCIDENT CONTENT INTO NURSING COURSES

Much of the knowledge and experiences underpinning the MCI competencies are basic to nursing practice and already are included in the nursing curriculum. The competencies transcend all essential components of nursing education. New ways of presenting or re-emphasizing existing content or principles throughout the entire curriculum to stimulate critical thinking and the development of new skills related to MCIs is necessary. New case studies, new teaching–learning modules, simulations, small group discussions, and community-based experiences are among the pedagogies that could be used to achieve this goal. Examples of how content could be integrated throughout a typical nursing curriculum are outlined in Box 2. This is not intended to be a definitive outline for the placement or inclusion of all MCI content within the nursing curriculum. Rather it is intended as a starting point for evaluating and planning MCI curriculum.

The Federal Emergency Management Agency (FEMA) and other government agencies provide courses and training opportunities for field experiences

Box 2: Ways to integrate mass casualty incident content

Physical assessment course
History taking to elicit information about possible exposure to CBRNE agents, including place of employment, living, and recreation; recent travel; unexplained or vague symptoms; illness of family members, friends, and coworkers

Focused history taking to assess potential exposure to CBRNE, including signs and symptoms related to specific body systems

- Skin. Rashes, burns from radiation or chemical burns, or lesions
- Gastrointestinal system, Nausea, vomiting, or diarrhea
- Respiratory system. Cough or shortness of breath
- General. Elevated temperature and other potential changes in vital signs
- Neurological. Unexplained neurological changes, symptoms of intracranial pressure, or other symptoms of trauma
- Eye. Pain or changes in vision related to foreign bodies or chemical exposures.

Perform an age-appropriate assessment of a patient exposed to various CBRNE agents.

Advanced clinical skills laboratory course
Practice donning and working in personal protective equipment (PPE).

Discuss and practice decontamination principles and exercises in a health care institution and in other settings.

Demonstrate the use of various types of communication equipment used in the field during an MCI.

Practice basic therapeutic interventions (eg, basic first aid skills, oxygen administration and ventilation techniques, lavage techniques, and initial wound care) in a community setting with limited equipment and supplies.

Demonstrate principles of patient safety during transport through splinting, immobilizations, and monitoring.

Pathophysiology course
Neurological system. Discuss signs and symptoms of poisonous gas exposure and other agents and potential effects of other forms of trauma (eg, increased intracranial pressure).

Respiratory system. Discuss signs and symptoms, differential diagnosis of biologic and chemical agents that can be weaponized, such as anthrax.

Cardiovascular system. Discuss the signs and symptoms of biologic and chemical agent exposure and the impact on the cardiovascular system.

Infectious diseases. Discuss newly emerging infectious agents such as Severe Acute Respiratory Syndrome, signs and symptoms, detection and control.

Adult health course
When discussing principles of infection control and isolation techniques, introduce a scenario that encompasses multiple individuals, various biologic agents, and various settings.

Care of children course
Discuss the potential short- and long-term effects of an MCI on children of various ages, ethnicities, and cultures.

Discuss appropriate coping strategies that could be implemented with a group of school-aged children.

Mental health nursing course
Include content related to post-traumatic stress disorder and acute anxiety disorder and relate to responses to MCIs.

Include a discussion of group therapy application or measures for stress reduction for large groups/communities.

Identify all who may need mental health counseling during and after a disaster, including health care workers, the injured, family members, community members, and the nation. Discuss appropriate resources for referring and treating these various groups.

Practice principles of risk communication to groups and individuals affected by exposure during an MCI.

Discuss the cultural, spiritual, and social issues that may affect an individual's response to an MCI.

Community health nursing course
As part of a community assessment, identify possible threats and their potential impact on the health care system and community at large in a specified locale or geographic area.

Identify community health issues related to limiting exposure to selected MCI agents; water, air, and food supply contamination; and shelter and protection of displaced persons in the community.

Describe the local chain of command and management system for emergency response during an MCI in a specific community or region.

Discuss how agencies/resources are coordinated and the role(s) of each in an MCI.

Include a discussion and simulation of communication networks that are essential for smooth delivery of care and control of panic.

Review and discuss the identified community disaster plan for local community or region. Identify individual roles for nurses. Identify one's own potential role within the community disaster plan.

Health care systems and organizations
Review and discuss at least one health care institution's disaster plan with focus on the various roles (or potential roles) of nurses.

Identify and discuss the impact various types of MCIs potentially would have on the health care institution(s) in the local community, including personnel, pharmaceuticals, and medical supplies.

Ethics
In an interprofessional seminar, discuss issues related to abandonment of patients; roles and responsibilities assumed by volunteer efforts; rights of individuals to refuse care; allocation of limited resources; and rights and responsibilities of health care providers in MCIs.

When discussing end-of-life care, discuss the ethical, legal, psychological, and cultural considerations when dealing with the dying or handling and storage of human remains in an MCI.

Use the American Nurse's Association Position Statement on Work Release During a Disaster: Guidelines for Employers [10] as a basis for discussion on responsibilities of nurses and other health care providers during an MCI, or on potential roles of nurses during an MCI.

related to CRBNE responses and disaster drills. Schools of nursing could collaborate with the local Emergency Medical Service or other agency to schedule their nursing students to participate in a disaster field experience. This exercise could be incorporated into the curriculum as a 1-week clinical experience. It also is recommended that all RNs participate in biannual emergency response drills organized through the Office of Emergency Preparedness.

FUTURE WORK AND CHALLENGES

The nursing community has recognized the potential impact that nurses can and should make in emergency preparedness and response. Other health care providers and federal, state, and local agencies are following the INCMCE lead in developing provider competencies, developing learning resources, and ensuring that nurses are prepared and a central component of any disaster response plan.

The INCMCE, nursing organizations, and schools face additional challenges in assuring an adequately prepared nursing workforce. Specialized MCI competencies should be developed for APNs and nurses in specialized areas of practice. APN competencies that address the higher-level triage, diagnostic, and treatment capabilities of the APN, inter-professional collaboration, health policy, and the broad systems focus the APN brings to the health care arena would further define the APN as a significant resource in emergency preparedness. In addition, the development of MCI competencies and the delineation of roles for other nursing specialties, such as administration, community health, critical care, and school health, would assist government and health care planners in appropriately using nurses in emergency response plans.

Faculty development in the area of MCE is an immediate need. As government agencies and health care institutions broaden the expectations and requirements related to emergency preparedness and response, there will be a growing demand for continuing education providers and nursing faculty with the necessary MCI expertise.

The need for quality resources for group and individual learning related to MCIs and emergency preparedness presents another immediate challenge for nursing education. Immediately after September 2001, many Web sites, reports, and articles appeared. Faculties attempting to develop appropriate programming or curricula for nurses or other health professionals were overwhelmed. Resources, including learning/teaching modules, are being developed for nurses and other health care professionals. Veenema has developed a companion curriculum guide for her text on disaster nursing [11]. In addition, a full on-line course and curriculum are being developed. An on-line curriculum also is being developed at the Vanderbilt University School of Nursing. Other teaching modules and health profession curricula are being developed through 2003 Health Resources and Services Administration cooperative agreements.

Finally, a research framework that addresses nursing roles in MCIs, appropriate responses, preparedness, and outcomes should be developed. Because of the nature of MCIs and the need for an interprofessional response, a collaborative research framework and approach would seem to address this pressing need best.

SUMMARY

Ensuring that nursing as a profession is prepared to meet the country's need for emergency preparedness requires the collaborative effort of all nursing education as broadly described. Schools of nursing and individual faculty have a particularly challenging task of ensuring that all future nursing graduates have basic knowledge and skills related to MCIs. The INCMCE has developed a set of national consensus-based competencies that provide a framework for MCI education. Educating 2.7 million nurses and all future nurses regarding MCIs is an unheralded feat; however, nurses, because of their unique nursing education and perspective practicing in multiple roles and settings, provide an unduplicated resource for mass casualty preparedness and response.

APPENDIX 1. EXAMPLES OF THE EDUCATIONAL COMPETENCIES FOR REGISTERED NURSES RELATED TO MASS CASUALTY INCIDENTS [8]

Core competencies

I. Critical thinking
   A. Use an ethical and nationally approved framework to support decision-making and prioritizing needed in disaster situations.
   B. Use clinical judgment and decision-making skills in assessing the potential for appropriate, timely individual care during an MCI.

II. Assessment
   A. General
      - Assess the safety issues for self, the response team, and victims in any given response situation, in collaboration with the incident response team.
      - Identify possible indicators of a mass exposure (ie, clustering of individuals with the same symptoms).
      - Describe the essential elements included in an MCI scene assessment.
   B. Specific
      - Conduct a focused health history to assess potential exposures to CBRNE agents.
      - Assess the immediate psychological response of the individual, family, or community following an MCI.
      - Perform an age-appropriate health assessment, including:
        1. Airway and respiratory assessment
        2. Cardiovascular assessment, including vital signs and monitoring for signs of shock

3. Integumentary assessment, particularly a wound, burn, and rash assessment
4. Pain assessment
5. Injury assessment from head to toe
6. Gastrointestinal assessment, including specimen collection
7. Basic neurological assessment
8. Musculoskeletal assessment
9. Mental status, spiritual, and emotional assessment

III. Technical skills
- A. Demonstrate safe administration of medications, particularly vasoactive and analgesic agent, by oral (PO), subcutaneous (SQ), intramuscular (IM), and intravenous (IV) administration routes.
- B. Demonstrate the safe administration of immunizations, including smallpox vaccination.
- C. Assess the need for and initiate the appropriate CBRNE isolation and decontamination procedures available, ensuring that all parties understand the need.
- D. Demonstrate knowledge and skill related to personal protection and safety, including the use PPE for Level B and C protections and respiratory protection.
- E. Demonstrate the ability to maintain patient safety during transport through splinting, immobilization, monitoring, and therapeutic interventions.

IV. Communication
- A. Describe the local chain of command and management system for emergency response during an MCI.
- B. Identify one's own role in the emergency response plan for the place of employment.
- C. Demonstrate appropriate emergency documentation of assessments, interventions, nursing actions, and outcomes during and after an MCI.
- D. Identify appropriate resources for referring requests from patients, media, or others for information regarding MCIs.
- E. Describe appropriate coping strategies to manage self and others.
- F. Core competencies
  - I. Health promotion, risk reduction, and disease prevention
    - A. Identify possible threats and their potential impact on the general public, emergency medical system, and the health care community.
    - B. Describe community health issues related to MCI events, specifically limiting exposure to selected agents; contamination of water, air, and food supplies; and shelter and protection of displaced persons.
  - II. Health care systems and policy
    - A. Define and distinguish the terms disaster and MCI in relation to other major incidents or emergency situations.
    - B. Define relevant terminology, including:
      1. CBRNE
      2. Weapons of mass destruction (WMD)
      3. Triage
      4. Chain of command and management system for emergency response
      5. PPE

6. Scene assessment
7. Comprehensive emergency management

C. Describe the legal authority of public health agencies to take action to protect the community from threats, including isolation, quarantine, and required reporting and documentation.
D. Recognize the impact MCIs may have on access to resources and identify how to access additional resources (eg, pharmaceuticals and medical supplies).

III. Illness and disease management
A. Discuss the differences/similarities between an intentional biological attack and that of a natural disease outbreak.
B. Describe, using an interdisciplinary approach, the short- and long-term effects of physical and psychological symptoms related to disease and treatment secondary to MCIs.

IV. Information and health care technologies
A. Describe the use of emergency communication equipment that must be used in a MCI response.
B. Discuss the principles of containment and decontamination.
C. Describe how nursing skills may have to be adapted while wearing PPE.

V. Ethics
A. Identify and discuss ethical issues related to MCI events, including:
1. Rights and responsibilities of health care providers in MCIs (eg, refusing to go to work or report for duty or refusal of vaccines)
2. Need to protect the public versus an individual's right for autonomy (eg, right to leave the scene after contamination)
3. Right of the individual to refuse care, informed consent
4. Allocation of limited resources
5. Confidentiality of information related to individuals and national security
6. Use of public health authority to restrict individual activities, requiring reporting from health professionals, and collaborating with law enforcement

B. Describe the ethical, legal, psychological, and cultural considerations when dealing with the dying and/or the handling and storage of human remains in an MCI.
C. Identify and discuss legal and regulatory issues related to:
1. Abandonment of patients
2. Response to an MCI and one's position of employment
3. Various roles and responsibilities assumed by volunteer efforts

VI. Human diversity
A. Discuss the cultural, spiritual, and social issues that may affect an individual's response to an MCI.
B. Discuss the diversity of emotional, psychosocial and socio–cultural responses to terrorism or the threat of terrorism to one's self and others.

- A seventh area of core knowledge, Global Health Care, is included in the AACN Essentials document. Through the consensus-building process to develop a set of national nursing MCI competencies, no competencies were identified or categorized under this core knowledge area. Many of the MCI competencies, however, overlap areas of content and skill and could be identified under several areas of core competence, core knowledge, or professional development.

References

[1] Spratley E, Johnson A, Sochalski J, et al. The registered nurse population findings from the national sample survey of registered nurses. Washington (DC): U S Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Division of Nursing; 2000.

[2] Joint Commission on Accreditation of Healthcare Organizations. Special issue. Joint Commission Perspectives 2001;21(12):1–23. Available at: jcrinc.com/docviewer.aspx. Accessed June 1, 2005.

[3] Task Force of Health Care and Emergency Services Professionals on Preparedness for Nuclear, Biological, and Chemical Incidents. Final report: developing objectives, content, and competencies for the training of emergency medical technicians, emergency physicians, and emergency nurses to care for casualties resulting from nuclear, biological, or chemical (NBC) incidents (Contract No. 282-98-0037). Washington (DC): Department of Health and Human Services and American College of Emergency Physicians; 2001.

[4] Association of State and Territorial Directors of Nursing. Position paper: public health nurses' vital role in emergency preparedness and response. Atlanta (GA): Association of State and Territorial Directors of Nursing; 2002.

[5] Center for Health Policy. Columbia University School of Nursing. Core public health worker competencies for emergency preparedness and response. Atlanta (GA): Centers for Disease Control and Prevention; 2001.

[6] University of Ulster, University of Glamorgan School of Health Sciences School of Nursing. Course document for postgraduate diploma/MSc in disaster relief nursing for entry September 1999. Ulster (UK): University of Ulster; 1998.

[7] National Organization of Nurse Practitioner Faculties & American Association of Colleges of Nursing. Nurse practitioner primary care competencies in specialty areas: adult, family, gerontological, pediatric, and women's health. Rockville (MD): Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Division of Nursing; 2002.

[8] International Nursing Coalition for Mass Casualty Education. Educational competencies for registered nurses responding to mass casualty incidents. Available at: http://www.aacn.nche.edu/Education/pdf/INCMCECompetencies.pdf. Accessed May 31, 2005.

[9] American Association of Colleges of Nursing. The essentials of baccalaureate education for professional nursing practice. Washington (DC): American Association of Colleges of Nursing; 1998.

[10] American Nurses Association. Position Statement on work release during a disaster: guidelines for employers. Adopted by the ANA Board of Directors. Effective June 24, 2002. Available at: http://www.nursingworld.org/readroom/position/social/scwrkrel.htm. Accessed May 31, 2005.

[11] Veenema TG, editor. Disaster nursing and emergency preparedness for chemical, biological and radiological terrorism and other hazards. New York, NY: Springer Publishing Company; 2003.